

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor

: Yuta NAKAYA, et al.

Filed

: Concurrently herewith

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: COMMUNICATIONS APPARATUS USING....

Serial No.

: Concurrently herewith

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

January 9, 2004

## INFORMATION DISCLOSURE STATEMENT

SIR:

In order to comply with discretionary regulations 37 CFR 1.97 and 1.98, attached hereto is a copy of Form PTO-1449 and copies of the documents listed thereon. These documents contain information which the Examiner may consider to be important in deciding whether to issue a patent in the instant application.

For documents written in a language other than English, English language abstracts are annexed thereto explaining relevancy in accordance with 37 CFR §1.98 (a)(3).

As this Statement is being filed prior to issuance of a first Office Action, no fee is due.

The present Disclosure Statement is being submitted in compliance with 37 CFR 1.56 as an Examiner might consider any cited document important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended

that the cited documents represent the results of a complete search, and it is anticipated that the Examiner in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104 (a), and in the course of such search will review for relevance every document cited on the attached form even if not initialed.

Early and favorable consideration is respectfully solicited.

Any fee due with this paper may be charged on Deposit Account 50-1290.

Respectfully submitted,

Thomas DBean Reg. No. 44,528

Katten Muchin Zavis Rosenman 575 Madison Avenue New York, NY 10022-2585 (212) 940-8800 Docket No: FUJO 20.845 type a plus sign  $(+) \rightarrow +$ 

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of 1

Application No. Filing Date First Named Inventor: Y. NAKAYA Group Art Unit Examiner Name Attorney Docket No.: FUJO 20.845

			U.S. PAT	ENT DOCUMENTS			
Examiner Initials	Cite No.1	U.S. Patent Document	Kind Code if known <sup>2</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns Lines Where Relevant Passages Relevant Figures Appear	
	1						
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#### **FOREIGN DOCUMENTS** Country Name of Patentee or Applicant Date of Pages, Columns Examiner Cite No.1 Foreign Patent of Cited Document Publication of Lines Where Initials Document Office<sup>3</sup> Number<sup>4</sup> Cited Document Relevant Passages or Kind Code5 MM-DD-YYYY Relevant Figures Appear (if known) NTT IDO TSUSHINMO KK 8-331025 JP 12-13-1998

### Other Prior Art-Non Patent Literature Documents

Examiner	Cite	Include name of the author (in CAPITAL LE	Applicant check her if		
Initials	No.	appropriate), title of the item (book, magazin	English language		
		date page(s), volume-issue number(s), publis	translation attached		
	1	A. Nishikawa, et al. A Study on OFDM			
		Communications. Technical Report of I			
		A. Nishikawa, et al. OFDM Adaptive A			
		Suppression. Technical Report of IEICE			
		J. Cheng, et al. Adaptive Beamforming			
	}	Gradient Algorithm. IEICE Trans. Com			
		July 2001			
Examiner			Date		
Signature			Considered		

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Unique citation designation number. \*See attached Kinds of U.S. Patent Documents. \*Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.1\* if possible. \*Applicant is to place a check mark here if English language Translation is attached.

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